

NORTH COAST CORRIDOR PUBLIC WORKS PLAN/ TRANSPORTATION & RESOURCE ENHANCEMENT PROGRAM (PWP/TREP)

AMENDMENT TEXT CHANGES

ADOPTED DECEMBER 7, 2016

SECTION 5.5: ENVIRONMENTALLY SENSITIVE HABITAT AREAS AND SPECIAL-STATUS SPECIES

(Pages 5.5-40 through 5.5-42)

- **Implementation Measure 5.5.8:** The following mitigation measures shall be implemented for all new transportation and associated community and resource enhancement projects to minimize impacts to wildlife species during construction.
 - A channel large enough to maintain hydrologic function/connectivity and for fish passage would be kept open throughout construction within the San Luis Rey River and all of the lagoons.
 - All pile driving near the lagoons would be completed outside the bird breeding season (February 15-September 15) to minimize construction noise impacts to bird species around the lagoons, if feasible.
 - If pile driving near the lagoons is necessary during the bird breeding season, the following mitigation measures shall be required from February 15 through September 15:
 - Pre-construction bird surveys will be completed to document the location of occupied areas;
 - A biologist knowledgeable in the specific nesting bird species will be present to monitor bird reactions to noise when pile driving begins and throughout pile driving activities to ensure that listed avian species are not being disturbed. The biologist shall halt work if birds are startling off nests in response to the impact of a pile driving hammer and consult with USFWS prior to continuing with any pile driving activities;
 - Pile driving will be conducted with a vibratory hammer to reduce construction noise and concussive pressure waves whenever possible;
 - An impact hammer may be used to proof the piles only if it is infeasible to use a vibratory hammer, and monitoring demonstrates that noise levels in areas occupied by individual nesting of Coastal California gnatcatcher, Ridgway's rail, or other listed avian species will remain below 80 dBA 1-hour Leq;
 - Noise attenuation measures (e.g., cofferdams and/or a shroud of blankets around the driving hammer) will be implemented to reduce pile driving noise;
 - No pile driving would be allowed within 600 feet of documented nesting colonies of California least tern and/or western snowy plover; and
 - If pile driving or general construction takes place within 2000 feet of a documented nesting colony of California least tern and/or western snowy plover, noise levels shall remain below 72 dBA 1-hour Leq and below a maximum of 78 dBA.
 - Pile driving for bridge construction near the San Luis Rey River will be completed between September 16 and February 14.
 - If pile-driving takes place in or adjacent to lagoon waters greater than 1 meter in depth, there shall be a hydroacoustic monitoring plan to avoid injury to fish or marine mammals from high

levels of underwater sound. The plan shall take into consideration both peak and cumulative exposure to sound. The plan shall include provisions for stopping pile driving if Caltrans dual criteria for injury to fish are exceeded (206 dB peak or 187 dB accumulated sound exposure level).

- During in-water bridge construction activities at all lagoons, bubble curtains, cofferdams or other methods to minimize acoustical impacts to aquatic and avian species would be implemented. If feasible, a hydraulic driver shall be used to further reduce noise levels. These measures would be developed in conjunction with the resource agencies when the project design and construction methodology is further developed.
- A qualified biologist would be made available for both the preconstruction and construction phases to review grading plans, address protection of sensitive biological resources, and monitor ongoing work. In cooperation with the biologist, an acoustic specialist will monitor pile driving noise levels. The biologist should be familiar with the habitats, plants, and wildlife of the project area, and maintain communications with the resident engineer and acoustic specialist, to ensure that issues relating to biological resources are appropriately and lawfully managed.
- Detention basins would be placed in many of the loop ramps, and bioswales would be placed on many of the slopes to treat runoff from the freeway.
- Lighting used at night for construction would be shielded away from ESHAs.
- Dust generated by proposed operations would be controlled with BMPs.

Any modifications to these mitigation measures shall only be considered after consultation and approval from the appropriate resource agency (e.g., USFWS for birds, National Marine Fisheries Service for fish and marine mammals) and/or the REMP working group.